

WHAT IS CLAIMED IS:

1. A hoodless incubator, comprising:

a bed;

an air jet unit arranged above the bed and directed toward the bed, said air jet unit discharging a jacketed impinging jet, comprising an inner, air-conditioned core jet and a non-air-conditioned jacket jet jacketing the core jet;

5 a fan;

a heating and humidifying device;

a channel-like edge area surrounding said bed;

10 a feed channel, said fan being arranged in said feed channel and said heating and

humidifying device being arranged in said feed channel, said channel-like edge area being in flow connection via said feed channel with said air jet unit in order to form said air-conditioned core jet.

2. A hoodless incubator in accordance with claim 1, further comprising a second feed

channel with a second fan, wherein said non-air-conditioned jacket jet consists essentially of ambient air, which is fed to the air jet unit via said second feed channel with said second fan.

3. A hoodless incubator in accordance with claim 1, wherein the velocities of said core jet

and said jacket jet during the discharge from said air jet unit are between 0.2 m and 1 m per sec and the ratio of the velocity of the core jet to the velocity of the jacket jet is approx. 3:1.

4. A hoodless incubator in accordance with claim 1, wherein the air volume flow discharged from the air jet unit is 300 to 900 L per minute for the core jet and 600 L to 1,800 L per minute for the jacket jet.
5. A hoodless incubator in accordance with claim 1, wherein said air jet unit is arranged pivotably above one of the front surfaces of the bed, so that the impinging jet discharged from said air jet unit, which is composed of said core jet and said jacket jet forms an angle of less than 90° with the bed.
6. A hoodless incubator in accordance with claim 1, wherein said air jet unit is arranged pivotably above one of the front surfaces of the bed, so that the impinging jet discharged from said air jet unit, which is composed of said core jet and said jacket jet forms an angle of 20° to 70° with the bed.
7. A hoodless incubator in accordance with claim 1, further comprising a radiant heater disposed for directing heat toward said bed.
8. A hoodless incubator in accordance with claim 1, wherein said feed channel has an air outlet to the environment.
9. A hoodless incubator in accordance with claim 8, wherein said air outlet to the environment is located between the first fan and the heating and humidifying device.
10. A hoodless incubator in accordance with claim 1, wherein the heating and humidifying

device is controlled as a function of the temperature and the humidity of the ambient air such that a preset temperature and a preset humidity are obtained in the area above the bed.

11. A hoodless incubator in accordance with claim 1, wherein the core jet has a relative humidity between 35% and 85% and a temperature between 28°C and 39°C, and the relative humidity and the temperature of the jacket jet discharged from said air jet unit correspond to those of the ambient air.

12. An incubator system, comprising:

a patient surface;

an air jet unit arranged above the patient surface and directed toward the patient surface, said air jet unit discharging a jacketed impinging jet, comprising an inner, air-conditioned core jet and a non-air-conditioned jacket jet jacketing the core jet, said patient surface and said air jet unit being disposed relative to each other to provide an access space continuing uninterrupted from said air jet unit to said patient surface on at least one side of said patient surface;

a fan;

a heating and humidifying device;

10 a channel at an edge of said patient surface;

a feed channel, said fan being arranged in said feed channel and said heating and humidifying device being arranged in said feed channel, said channel being in flow connection via said feed channel with said air jet unit in order to form said air-conditioned core jet.

13. An incubator system in accordance with claim 12, further comprising a second feed channel with a second fan, wherein said non-air-conditioned jacket jet consists essentially of

ambient air, which is fed to the air jet unit via said second feed channel with said second fan.

14. An incubator system in accordance with claim 12, wherein the velocities of said core jet and said jacket jet during the discharge from said air jet unit are between 0.2 m and 1 m per sec and the ratio of the velocity of the core jet to the velocity of the jacket jet is approx. 3:1.

15. An incubator system in accordance with claim 12, wherein the air volume flow discharged from the air jet unit is 300 to 900 L per minute for the core jet and 600 L to 1,800 L per minute for the jacket jet.

16. An incubator system in accordance with claim 12, wherein said air jet unit is arranged pivotably above one of the front surfaces of the patient surface, so that the impinging jet discharged from said air jet unit, which is composed of said core jet and said jacket jet is directable at said patient surface at an angle of from 90° to less than 90° with respect to said patient surface whereby the access space continuing uninterrupted from said air jet unit to said patient surface on at least one side of said patient surface may be varied.
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17. An incubator system in accordance with claim 12, further comprising a radiant heater disposed for directing heat toward said patient surface.

18. An incubator system in accordance with claim 12, wherein said feed channel has an air outlet to the environment located between the first fan and the heating and humidifying device.

19. An incubator system in accordance with claim 12, wherein the heating and

humidifying device is controlled as a function of the temperature and the humidity of the ambient air such that a preset temperature and a preset humidity are obtained in the area above the patient surface based on a core jet having a relative humidity between 35% and 85% and a temperature
5 between 28°C and 39°C, and said jacket jet discharged from said air jet unit having a relative humidity and a temperature substantially corresponding to those of the ambient air.